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# PRODUCTION

FOR MANAGERS OF MANUFACTURING TECHNOLOGY

Show Issue

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KEVIN KENDRICK
CONGRESSIONAL INFO SVC
4520 EAST WEST HWY #800
BETHESDA MD
20814

## IMTS-86

The world of manufacturing technology

# PRODUCTION

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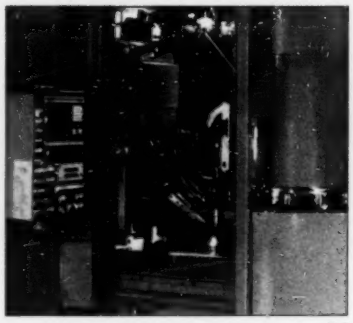

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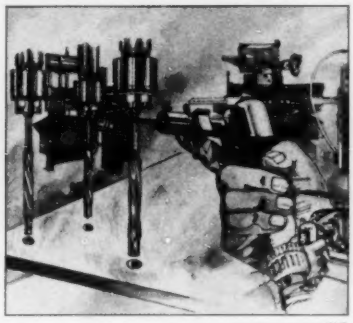

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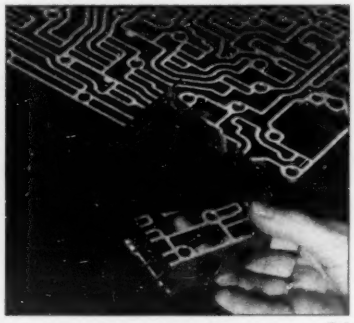

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WASHINGTON

# Government Programs Offer Industry Help

A variety of government sponsored programs have been established through the years with the sole purpose of improving U.S. manufacturing capabilities. One such program, NASA's Technology Utilization Program, mandated under the Space Act, has successfully transferred its technology to the commercial sector for non-aerospace applications for more than 20 years.

For example, U.S. automakers have repeatedly drawn upon NASA resources to apply its advanced materials technologies to the development of ceramic and composite materials applications for automobiles. A heavy equipment manufacturer is drawing upon NASA's ultrasonic techniques to measure the properties of casting materials for non-destructive testing. In yet another instance, advanced turbo charged engines are being developed with the use of NASA software to calculate mass flows and predict performance.

The Technology Utilization Program is divided into two service areas—information and applications engineering. Information is available through a bi-monthly technical journal, NASA licensing agreements can be negotiated. However, more than 90 pct of the NASA developed technology lies within the public domain.

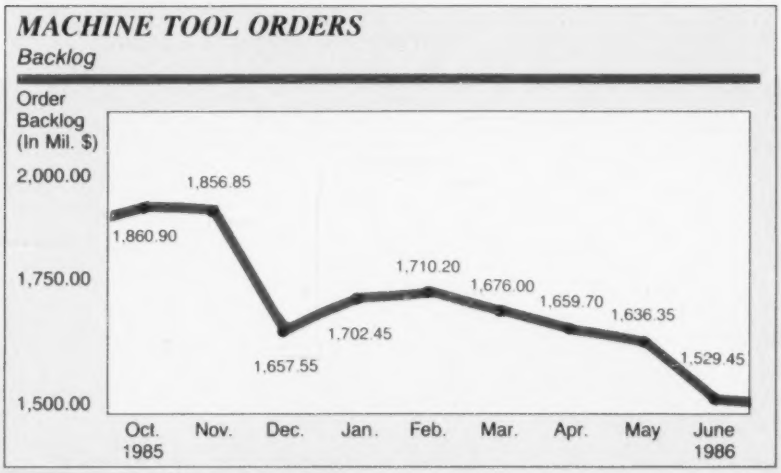
In addition, NASA field centers are available, by agreement, for R&D use. Under a Technical Exchange Agreement, NASA and a company will share information, facilities and expertise and jointly conduct research, testing and evaluation. In other cases, NASA TECH BRIEFS, available free to qualified individuals and organizations, the annual report, SPINOFFS, and a network of Industrial Applications Centers (IAC).

The IACs maintain computerized information banks of technical data and also offer technical consultation services and/or referral to other experts. User fees are charged for IAC information services, typically $100 to $300 for a database search and $2,000 to $3,000 for technical consultations.

A Technology Application Team is available for technology matching and problem solving assistance to identify and solve critical problems with existing NASA technology. Occasionally, NASA will hold a patent—in that event and the company will cooperate.

Finally, NASA and other government agencies have made available software programs and related documentation.

*–Washington D.C. reported by Ed Bowers/Maryland*




# Machine Tool Orders Sag in June

Machine tool orders fell 11.2 pct for the first six months of 1986 compared to the same period a year ago, according to the National Machine Tool Builders' Association (NMTBA).

Mid-year orders totaled $1.2 billion. This reflects a 10.6 pct year-to-date drop in orders for metal cutting equipment and a 12.9 pct drop for metal forming.

For the month of June, metal cutting orders rose 10.7 pct over the previous month to a total value of $156 million but were down 14.2 pct compared to June a year ago.

Metal forming orders fell 31.2 pct for the month to a total of $44 million resulting in a combined cutting and forming drop in orders of 2.4 pct.

Total shipments of cutting and forming machinery rose by 34.2 pct for June, to $308 million from the $229 million for May. Shipments of metal cutting equipment rose to $241 million, a 40.2 pct increase while metal forming shipments rose to $66 million, up 16.2 pct. Year-to-date shipments were up 20.3 pct over 1985.

The spurt in activity in shipments caused industry backlogs to fall to $1,529.45 million in June.

Metal cutting backlogs were down to 1,188.25 million and metal forming backlogs fell to $341.20 million.

"The decline in orders for the first half of 1986 is very troubling to us but it is not surprisingly given the tentative attitude of investors of capital equipment as they wait out the tax debate," said NMTBA President, James A. Gray.